

ABSTRACT

5 A "passive-active" mount includes an emanator-securement plate, a
foundation-securement plate, at least one elastomeric "streamlined
resilient element," and at least one collocated motion sensor-vibratory
actuator pair. The mount brings to bear, sequentially and
complementarily, passive vibration control followed by active vibration
control. The passive vibration control is effectuated by one or more
"streamlined resilient elements," each attributed with a "constant natural
frequency" (CNF) property whereby such element is naturally predisposed
to passively reducing vibration at a particular frequency band regardless of
the extent of the loading, within certain limits, to which such element is
being subjected. Cumulatively, the streamlined resilient element(s)
passively reduce(s) the emanated vibration in CNF fashion before reaching
15 the foundation-securement plate, whereupon the active vibration control is
effectuated via one or more electrical feedback loops, each involving a
processor/controller and a collocated sensor-actuator pair.